

## Final test (zachet 1 semester)

1. Law of dynamics (Newton's law 2)
2. Gravity force
3. Hook's law
4. Kinetic friction
5. Angular velocity
6. Stokes' law
7. Kinetic energy
8. Potential energy
9. Power
10. Momentum
11. Pressure
12. Ideal gas law
13. Angular acceleration
14. Torque
15. Momentum of inertia of a point particle
16. Rotational kinetic energy
17. Density
18. Archimedes' principle (buoyant force)
19. Conservation of flow (law)
20. Liquid pressure (in liquid columns)
21. Poiseuille's law
22. Reynolds number
23. Bernoulli's principle
24. First law of thermodynamics
25. Specific heat capacity
26. Efficiency of heat engine
27. Efficiency of Carnot engine
28. Height to which capillary action will lift liquid
29. Gravitation force

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### Example of answer:

acceleration

$$a = \frac{v_f - v_i}{\Delta t}$$

$a$  is acceleration [ $\text{m}\cdot\text{s}^{-2}$ ]

$v_f$  is final speed [ $\text{m}\cdot\text{s}^{-1}$ ]

$v_i$  is initial speed [ $\text{m}\cdot\text{s}^{-1}$ ]

$\Delta t$  is time interval [s]